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PRELIMINARY REPORT
INDUSTRY SERIES

1987
Census of Manufactures

MC87-I-24C(P)
Issued July 1989

WOODEN CONTAINERS AND MISCELLANEOUS WOOD PRODUCTS

Industries 2441, 2448, 2449, 2491, 2493, and 2499

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.[1]

INDUSTRY 2441, NAILED WOOD BOXES AND SHOOK

In the 1987 Census of Manufactures, Industry 2441, Nailed Wood Boxes and Shook, had employment of 5.9 thousand. The employment figure was 8 percent below the 6.4 thousand reported in 1982. Compared with 1986, employment in 1987 increased 5 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $322.9 million.

In 1987, establishments in this industry accounted for 79 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 81. The products primary to this industry appear in table 2 and aggregated to $346.0 million in 1987.

The cost of materials and services used by establishments in this industry amounted to $181.0 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2448, WOOD PALLETS AND SKIDS

In the 1987 Census of Manufactures, Industry 2448, Wood Pallets and Skids, had employment of 25.8 thousand. The employment figure was 17 percent above the 22.1 thousand reported in 1982. Compared with 1986, employment in 1987 increased 25 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $1.5 billion.

In 1987, establishments in this industry accounted for 94 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 93. The products primary to this industry appear in table 2 and aggregated to $1.4 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $879.9 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2449, WOOD CONTAINERS, N.E.C.

In the 1987 Census of Manufactures, Industry 2449, Wood Containers, N.E.C., had employment of 5.4 thousand. The employment figure was 27 percent below the

[1]**Standard Industrial Classification Manual: 1987.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call **Bernice W. Patterson** (301) 763-5210.

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7.4 thousand reported in 1982. Compared with 1986, employment in 1987 increased 8 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $245.2 million.

In 1987, establishments in this industry accounted for 99 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 97. The products primary to this industry appear in table 2 and aggregated to $216.9 million in 1987.

The cost of materials and services used by establishments in this industry amounted to $134.9 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2491, WOOD PRESERVING

In the 1987 Census of Manufactures, Industry 2491, Wood Preserving, had employment of 11.5 thousand. The employment figure was 6 percent above the 10.9 thousand reported in 1982. Compared with 1986, employment in 1987 increased 4 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $2.1 billion.

In 1987, establishments in this industry accounted for 96 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was also 96. The products primary to this industry appear in table 2 and aggregated to $2.1 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.6 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2493, RECONSTITUTED WOOD PRODUCTS

In the 1987 Census of Manufactures, Industry 2493, Reconstituted Wood Products, had employment of 22.1 thousand.

The total value of shipments for establishments classified in this industry was $2.9 billion.

In 1987, establishments in this industry accounted for 95 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). The products primary to this industry appear in table 2 and aggregated to $2.9 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.5 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2499, WOOD PRODUCTS, N.E.C.

In the 1987 Census of Manufactures, Industry 2499, Wood Products, N.E.C., had employment of 55.7 thousand.

The total value of shipments for establishments classified in this industry was $3.3 billion.

In 1987, establishments in this industry accounted for 94 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). The products primary to this industry appear in table 2 and aggregated to $3.2 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.6 billion in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

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Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix]

Year[1]	Companies[2] (no.)	All establishments[3] Total (no.)	All establishments[3] With 20 employees or more (no.)	All employees Number (1,000)	All employees Payroll (million dollars)	Production workers Number (1,000)	Production workers Hours (millions)	Production workers Wages (million dollars)	Value added by manufacture[4] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories[4] (million dollars)	Ratios Specialization (percent)	Ratios Coverage (percent)
INDUSTRY 2441, NAILED WOOD BOXES AND SHOOK															
1987 Census	(NA)	303	94	5.9	84.3	4.8	9.0	57.2	145.4	181.0	322.9	5.4	36.9	91	79
1986 ASM[5]	(NA)	(NA)	(NA)	5.6	77.3	4.5	8.2	54.7	157.1	181.8	338.5	6.5	24.8	(NA)	(NA)
1985 ASM[5]	(NA)	(NA)	(NA)	6.0	79.1	4.8	8.9	56.0	146.8	179.6	329.7	4.8	21.8	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	6.7	80.9	5.8	10.0	59.3	147.6	187.4	336.8	[6]14.0	29.2	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	7.1	84.6	6.0	10.6	58.1	153.9	184.8	334.8	[6]12.5	37.8	(NA)	(NA)
1982 Census	335	338	90	6.4	76.5	5.3	9.4	56.0	137.9	166.7	306.8	6.9	29.9	90	81
1981 ASM	(NA)	(NA)	(NA)	6.7	83.7	5.5	10.2	46.1	104.7	128.7	235.7	5.2	23.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	7.8	70.8	6.5	11.8	51.6	127.8	157.1	283.3	[6]5.6	29.8	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	8.9	74.1	7.4	13.4	55.5	118.7	179.0	296.9	[6]4.8	33.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	9.2	78.9	8.0	14.8	58.7	116.8	176.9	297.4	[6]9.4	33.0	(NA)	(NA)
1977 Census	391	396	110	8.6	68.6	7.5	13.7	53.6	116.2	147.4	263.3	5.4	31.2	89	83
1976 ASM	(NA)	(NA)	(NA)	8.3	62.1	7.1	12.3	47.2	112.0	125.0	235.9	6.6	27.6	(NA)	(NA)
1975 ASM[5]	(NA)	(NA)	(NA)	7.2	50.6	6.0	10.6	37.4	94.7	106.6	205.7	7.1	27.1	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	9.7	64.1	8.5	15.5	50.6	129.3	133.4	262.3	[6]4.8	31.5	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	9.5	58.4	8.4	15.5	45.7	96.7	114.1	210.0	[6]6.6	27.4	(NA)	(NA)
1972 Census	424	436	130	10.7	61.1	9.5	18.4	49.0	103.8	136.3	237.9	6.4	26.1	88	87
INDUSTRY 2448, WOOD PALLETS AND SKIDS															
1987 Census	(NA)	1 688	420	25.8	326.1	21.7	38.3	234.7	616.4	879.9	1 495.3	41.0	115.5	93	94
1986 ASM[5]	(NA)	(NA)	(NA)	20.7	284.6	16.3	27.9	191.5	588.8	803.5	1 394.1	28.3	107.5	(NA)	(NA)
1985 ASM[5]	(NA)	(NA)	(NA)	21.2	301.8	17.4	33.2	209.1	598.3	771.9	1 363.9	39.7	110.5	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	22.3	268.2	18.8	34.3	200.8	602.7	804.2	1 400.9	[6]34.5	104.9	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	22.5	237.0	19.3	34.4	170.4	412.4	627.1	1 051.8	[6]34.3	103.0	(NA)	(NA)
1982 Census	1 649	1 677	362	22.1	230.4	18.4	32.7	165.0	420.5	589.1	1 012.3	29.4	104.3	92	93
1981 ASM	(NA)	(NA)	(NA)	22.7	237.7	19.4	35.6	178.0	425.0	549.2	974.1	[6]39.9	89.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	22.9	220.2	19.7	36.2	162.9	438.6	595.5	1 029.7	[6]26.7	88.1	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	24.6	220.7	21.7	40.3	168.2	398.3	606.5	1 001.2	[6]35.6	83.5	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	23.2	205.5	20.6	38.9	157.2	383.9	548.8	936.0	54.7	42.6	(NA)	(NA)
1977 Census	1 267	1 290	348	20.3	163.8	17.9	32.1	126.3	303.1	397.3	698.0	21.3	58.1	90	91
1976 ASM	(NA)	(NA)	(NA)	13.1	107.9	11.4	20.1	83.1	239.5	256.6	493.4	13.3	37.1	(NA)	(NA)
1975 ASM[5]	(NA)	(NA)	(NA)	13.0	107.0	11.1	19.0	80.0	223.3	247.6	475.1	19.6	35.9	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	15.7	108.8	13.7	24.9	82.6	262.8	262.4	521.3	[6]20.5	38.6	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	17.1	95.4	14.7	26.5	71.5	205.8	234.0	437.6	14.9	30.3	(NA)	(NA)
1972 Census	444	456	271	14.3	77.7	12.5	23.1	60.3	140.9	155.2	295.4	11.2	17.2	91	88
INDUSTRY 2449, WOOD CONTAINERS, N.E.C.															
1987 Census	(NA)	203	51	5.4	69.9	4.6	8.6	50.0	109.7	134.9	245.2	2.8	39.4	92	99
1986 ASM[5]	(NA)	(NA)	(NA)	5.0	58.3	4.4	8.2	46.2	84.0	151.0	235.8	3.0	48.1	(NA)	(NA)
1985 ASM[5]	(NA)	(NA)	(NA)	5.8	69.4	5.1	9.6	54.0	96.0	183.6	279.3	2.1	58.6	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	6.1	68.6	5.3	10.0	52.9	121.3	147.6	275.1	[6]2.8	50.7	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	7.1	85.7	6.2	12.6	68.1	131.4	169.8	309.2	[6]4.0	57.0	(NA)	(NA)
1982 Census	216	235	72	7.4	84.0	6.5	12.5	65.9	144.6	168.8	315.8	3.7	57.2	95	97
1981 ASM	(NA)	(NA)	(NA)	8.6	91.0	7.7	14.8	71.5	168.1	198.4	366.1	3.1	72.9	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	9.5	87.3	8.4	14.8	68.8	144.2	187.4	327.8	2.8	68.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	8.9	77.9	8.0	15.9	62.4	122.1	170.9	286.8	[6]7.0	51.0	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	8.8	72.0	7.9	14.8	57.8	132.2	157.1	291.0	[6]7.3	43.3	(NA)	(NA)
1977 Census	239	263	82	8.9	67.2	8.0	15.5	53.7	120.4	134.4	255.8	2.9	50.5	93	97
1976 ASM	(NA)	(NA)	(NA)	11.3	80.8	10.3	19.5	66.1	160.7	154.3	311.0	3.2	49.1	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	11.3	75.8	10.3	19.6	61.9	154.3	152.5	303.0	[6]9.9	47.3	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	12.5	76.9	11.4	23.2	53.8	159.2	161.6	316.4	[6]6.4	51.1	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	12.3	70.3	11.1	22.0	56.0	132.0	139.3	272.2	3.5	38.6	(NA)	(NA)
1972 Census	236	268	100	11.9	65.0	10.5	21.0	51.9	114.1	126.7	240.2	3.6	38.9	94	98
INDUSTRY 2491, WOOD PRESERVING															
1987 Census	(NA)	526	199	11.5	202.5	8.8	17.7	136.8	536.7	1 581.9	2 121.1	43.4	356.7	97	96
1986 ASM	(NA)	(NA)	(NA)	11.1	181.1	8.6	17.1	127.9	504.1	1 269.3	1 774.0	35.3	324.7	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	11.1	184.0	9.0	18.2	133.1	525.9	1 206.4	1 683.5	47.7	323.4	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	10.7	171.7	8.8	18.3	127.0	495.2	1 177.4	1 625.5	43.5	302.9	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	10.2	155.7	8.1	15.7	108.3	334.3	1 031.7	1 378.4	23.8	298.9	(NA)	(NA)
1982 Census	428	524	184	10.9	159.4	8.6	16.5	108.2	383.7	978.5	1 360.2	35.9	315.3	98	96
1981 ASM	(NA)	(NA)	(NA)	12.3	173.5	9.8	19.9	117.3	419.6	972.8	1 389.0	43.4	289.5	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	13.2	170.6	10.6	21.2	118.3	449.7	975.7	1 397.4	43.3	284.0	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	12.9	153.8	10.4	20.8	105.5	394.4	867.6	1 246.6	46.4	242.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	12.9	142.2	10.2	21.0	93.8	385.7	781.4	1 166.8	[6]36.3	219.5	(NA)	(NA)
1977 Census	368	457	192	12.6	126.1	9.9	19.7	82.9	327.1	657.5	962.6	30.3	212.5	97	97
1976 ASM	(NA)	(NA)	(NA)	9.7	94.5	7.7	15.4	59.3	229.0	476.6	704.3	22.3	159.7	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	9.3	87.5	7.4	15.7	60.2	228.3	415.8	647.7	[6]27.5	155.7	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	10.6	93.6	8.6	18.5	68.1	326.3	479.8	761.2	28.1	168.4	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	10.1	75.1	8.4	17.9	55.1	186.3	371.5	557.4	11.6	96.6	(NA)	(NA)
1972 Census	309	399	168	11.3	74.5	9.2	18.8	54.4	175.8	303.6	475.8	14.8	94.7	99	96
INDUSTRY 2493, RECONSTITUTED WOOD PRODUCTS[7]															
1987 Census	(NA)	253	157	22.1	506.8	17.7	37.2	370.5	1 376.2	1 497.1	2 879.8	150.9	257.3	99	95
INDUSTRY 2499, WOOD PRODUCTS, N.E.C.[7]															
1987 Census	(NA)	3 200	666	55.7	818.8	46.0	85.9	572.5	1 714.8	1 575.4	3 272.6	73.9	486.7	95	94

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 2441, 19%; SIC 2448, 20%; SIC 2449, 12%; SIC 2491, 15%; SIC 2493, 5%; and SIC 2499, 32%.

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. [2]Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the industry chapter.

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years—Con.

[2]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
[3]Includes establishments with payroll at any time during year.
[4]Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.
[5]Data either have associated standard errors exceeding 15 percent or are not consistent with other census series and related data; thus, these estimates may be of limited reliability.
[6]Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.
[7]Industry definition is new for 1987 Census of Manufactures. An explanation of the Standard Industrial Classification revision will appear in the final industry series text that supercedes this report.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2441- —	**NAILED WOOD BOXES AND SHOOK**						
	Total	**(NA)**	**(X)**	**346.0**	**(NA)**	**(X)**	**314.6**
24411 —	Nailed or lock-corner wooden boxes	(NA)	(X)	95.3	(NA)	(X)	109.0
24411 27	Made from lumber — mil bd ft lum cons	(NA)	(S)	52.0	(NA)	(S)	64.0
24411 63	Made from veneer and plywood, and combination wood and fiber boxes, including wood and part wooden cigar boxes — do	(NA)	(X)	37.7	(NA)	(S)	24.9
24411 00	Nailed or lock-corner wooden boxes, n.s.k.	(NA)	(X)	5.6	(NA)	(X)	20.0
24412 —	Wooden box and crate shook	(NA)	(X)	181.3	(NA)	(X)	156.2
	Made from lumber:						
24412 11	For fruits and vegetables — mil bd ft	(NA)	*74.4	31.3	25	*229.0	62.0
24412 15	For industrial and other uses — do	(NA)	(S)	105.1	91	(S)	60.4
24412 25	Made from veneer and plywood for fruits, vegetables, meat, industrial, and other uses — do	(NA)	(X)	39.6	34	(S)	24.6
24412 00	Wooden box and crate shook, n.s.k.	(NA)	(X)	5.2	(NA)	(X)	9.3
24410 —	Nailed wooden boxes and shook, n.s.k.	(NA)	(X)	69.5	(NA)	(X)	49.4
24410 00	Nailed wooden boxes and shook, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	55.7	(NA)	(X)	40.0
24410 02	Nailed wooden boxes and shook, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	13.8	(NA)	(X)	9.4
2448- —	**WOOD PALLETS AND SKIDS**						
	Total	**(NA)**	**(X)**	**1 434.0**	**(NA)**	**(X)**	**969.7**
24480 —	Pallets and skids:						
24480 62	Pallets, wooden, flat — mil units	(NA)	(S)	818.0	582	(S)	511.8
24480 64	Pallet containers — do	(NA)	(X)	49.2	35	(S)	37.7
24480 65	Skids, wooden — do	(NA)	(X)	69.5	109	(S)	61.9
24480 66	Pallets and skids, wood and metal combination — do	(NA)	(X)	59.8	54	(S)	49.6
24480 00	Wood pallets and skids, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	334.3	(NA)	(X)	224.1
24480 02	Wood pallets and skids, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	103.2	(NA)	(X)	84.6
2449- —	**WOOD CONTAINERS, N.E.C.**						
	Total	**(NA)**	**(X)**	**216.9**	**(NA)**	**(X)**	**295.6**
24490 —	Wood containers, n.e.c.:						
24490 11	Wirebound boxes made from lumber — mil boxes	(NA)	(S)	23.7	16	(S)	30.8
	Wirebound boxes made from veneer and plywood:						
24490 21	For fruits and vegetables — mil boxes	(NA)	*52.2	66.2	15	55.6	60.4
24490 41	For meats and poultry (other than canned) — do	(NA)	(Z)	.2	4	2.4	4.2
24490 51	For industrial and other uses — do	(NA)	(S)	19.7	10	(S)	30.4
24490 61	Veneer and plywood containers, including pails, drums, tubs, fruit and vegetable baskets, hampers, etc. — mil containers	(NA)	(S)	27.0	21	(S)	31.8
	Slack and tight cooperage:						
24490 71	Slack cooperage (hogsheads, barrels, kegs, etc., including recoopered used slack barrels and kegs) — mil units	(NA)	(X)	8.8	6	(S)	20.6
24490 81	Tight cooperage (hogsheads, barrels, kegs, tubs, etc.), new and recoopered used — do	(NA)	(S)	28.0	15	(S)	82.3
24490 00	Wood containers, n.e.c., n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	26.2	(NA)	(X)	25.7
24490 02	Wood containers, n.e.c., n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	17.1	(NA)	(X)	9.3

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2491- —	**WOOD PRESERVING**						
	Total	**(NA)**	**(X)**	**2 114.6**	**(NA)**	**(X)**	**1 325.0**
24912 —	Wood poles, piles, and posts owned and treated by same establishment	(NA)	(X)	463.3	(NA)	(X)	461.1
	Not more than 15 feet in length treated with:						
24912 01	Pentachlorophenol (thousands)	(NA)	(S)	26.5			
24912 03	Arsenical chemicals (do.)	(NA)	(S)	62.4			
24912 05	Creosote (do.)	(NA)	(S)	16.5	51	(S)	78.2
24912 07	Other chemicals (do.)	(NA)	(S)	2.9			
	More than 15 feet in length treated with:						
24912 09	Pentachlorophenol (thousands)	(NA)	(S)	129.9			
24912 12	Arsenical chemicals (do.)	(NA)	(S)	26.4			
24912 14	Creosote (do.)	(NA)	*3 241.3	102.2	57	*4 371.7	340.5
24912 16	Other chemicals (do.)	(NA)	**1 205.3	45.6			
24912 00	Wood poles, piles, and posts owned and treated by same establishment, n.s.k.	(NA)	(X)	51.0	(NA)	(X)	42.3
24913 —	Other wood products owned and treated by same establishment	(NA)	(X)	1 242.6	(NA)	(X)	617.4
	Railway crossties and mine ties (except switch or bridge) treated with:						
24913 01	Creosote (thousands)	(NA)					
24913 03	Other chemicals (do.)	(NA)	*9 187.3	146.5	31	11 556.0	160.1
	Lumber, rough and dressed, not edged, treated with:						
24913 05	Fire-retardant, interior and exterior (mil bd ft.)	(NA)	*58.2	27.5			
24913 07	Pentachlorophenol (do.)	(NA)	(S)	26.2			
24913 09	Arsenical chemicals (do.)	(NA)	**1 998.5	687.1	105	*1 063.3	355.0
24913 12	Other chemicals (do.)	(NA)	(S)	138.4			
24913 14	Wood siding, flooring, other edged lumber (do.)	(NA)	*116.2	46.2			
24913 15	Wood fence pickets, paling, and rails, whether or not assembled into fence sections	(NA)	(X)	11.1	10	(X)	12.0
24913 17	Switch and bridge ties (1,000 units)	(NA)	(S)	16.2	11	(S)	11.1
24913 19	Other wood treated products, n.e.c., including plywood	(NA)	(X)	48.4	12	(X)	25.2
24913 00	Other wood products owned and treated by same establishment, n.s.k.	(NA)	(X)	100.0	(NA)	(X)	54.0
24919 —	Contract wood preserving	(NA)	(X)	105.5			
	Contract wood treating service (receipts for treating wood owned by other establishments):						
24919 01	Fire-retardant, interior and exterior	(NA)	(X)	9.4			
24919 03	Pentachlorophenol	(NA)	(X)	2.9	60	(X)	94.9
24919 05	Arsenical chemicals	(NA)	(X)	35.0			
24919 07	Creosote	(NA)	(X)	43.3			
24919 09	Other chemicals	(NA)	(X)	6.2			
24919 00	Contract wood preserving, n.s.k.	(NA)	(X)	8.7			
24910 —	Wood preserving, n.s.k.	(NA)	(X)	303.2	(NA)	(X)	151.6
24910 00	Wood preserving, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	226.1	(NA)	(X)	106.5
24910 02	Wood preserving, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	77.1	(NA)	(X)	45.1
2493- —	**RECONSTITUTED WOOD PRODUCTS**						
	Total	**(NA)**	**(X)**	**2 926.6**	**(NA)**	**(X)**	**1 704.1**
24931 —	Particleboard, produced at this location	(NA)	(X)	852.7	(NA)	(X)	[3] r 567.3
24931 03	Floor underlayment (mil sq ft (3/4 in. basis))	(NA)	694.8	129.2	14	702.7	93.8
24931 05	Mobile home decking (do.)	(NA)	(D)	(D)	9	214.6	45.5
24931 07	Shelving (do.)	(NA)	68.2	13.9	12	*52.7	10.1
24931 09	Door core (do.)	(NA)	(D)	(D)	7	**155.2	26.3
	Other industrial board:						
24931 12	3/4 inch thick (mil sq ft (3/4 in. basis))	(NA)	922.6	206.4	19	592.2	128.3
24931 14	5/8 inch thick (do.)	(NA)	552.7	124.2	16	279.8	65.0
24931 16	1/2 inch thick (do.)	(NA)	237.7	54.5	16	139.0	28.8
24931 18	All other (do.)	(NA)	602.8	144.9	19	r 624.9	r 124.2
24931 19	Other (stepping, siding, etc.) (do.)	(NA)	156.2	78.2	10	164.2	33.0
24931 00	Particleboard, produced at this location, n.s.k.	(NA)	(X)	36.6	(NA)	(X)	12.3
24932 —	Waferboard and oriented strand board:						
24932 00	Waferboard and oriented strand board (mil sq ft (3/8 in. basis))	(NA)	4 065.1	533.6	[3]	[3]	[3]
24933 —	Medium density fiberboard (MDF) produced at this location	(NA)	(X)	282.1	(NA)	(X)	r 131.3
	Not coated or prefinished:						
24933 14	Standard panel (mil sq ft (3/4 in. basis))	(NA)	741.1	233.8	7	*319.7	99.2
24933 15	Cut to size (do.)	(NA)					
24933 18	Coated or prefinished (do.)	(NA)	119.3	48.2	5	r 91.2	r 31.5
24933 00	Medium density fiberboard (MDF) produced at this location, n.s.k.	(NA)	(X)	-	(NA)	(X)	.6
24934 —	Hardboard products made from hardboard produced at this location:						
24934 00	Hardboard products made from hardboard produced at this location (for additional detail, see Current Industrial Report MA-26A, Pulp, Paper, and Board)	(NA)	(X)	574.2	(NA)	(X)	558.3
24935 —	Insulating board (fiberboard):						

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2493- --	**RECONSTITUTED WOOD PRODUCTS**—Con.						
24935 --	Insulating board (fiberboard)—Con.						
24935 00	Insulating board (fiberboard), less than 31 lb per cubic foot (for additional detail, see Current Industrial Report MA-26A, Pulp, Paper, and Board)	(NA)	(X)	209.7	10	(X)	188.9
24936 --	Hardboard products made from purchased hardboard	(NA)	(X)	204.5	(NA)	(X)	148.1
24936 14	Molded and cut to size (not face finished) ---- mil sq ft (1/8 in. basis)	(NA)	(S)	11.0	4	**83.6	16.8
24936 15	Other machined and cut, including perforated, panel stock, etc. (not face finished) ---- do	(NA)	*274.5	41.4	5	(S)	16.7
	Coated or laminated hardboard:						
24936 16	Interior paneling ---- mil sq ft (1/8 in. basis)	(NA)	(S)	43.7	8	**536.3	44.5
24936 17	Other, including doorskins, garage door panels, furniture stock, and siding ---- do	(NA)	(S)	44.2	13	212.5	39.1
24936 00	Hardboard products made from purchased hardboard, n.s.k.	(NA)	(X)	64.3	(NA)	(X)	30.4
24937 --	Prefinished particleboard and medium density fiberboard (MDF) made from purchased particleboard and MDF	(NA)	(X)	210.7	(NA)	(X)	110.3
24937 21	Prefinished particleboard made from purchased particleboard ---- mil sq ft (3/4 in. basis)	(NA)	**699.5	153.4	45	**768.0	98.4
24937 31	Prefinished or coated medium density fiberboard (MDF) made from purchased MDF ---- do	(NA)	*112.4	33.6	11	**29.2	11.9
24937 00	Prefinished particleboard and medium density fiberboard (MDF) made from particleboard and MDF, n.s.k.	(NA)	(X)	23.7	(NA)	(X)	-
24930 --	Reconstituted wood products, n.s.k.	(NA)	(X)	59.2	(NA)	(X)	(4)
24930 00	Reconstituted wood products, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	54.5	(NA)	(X)	(4)
24930 02	Reconstituted wood products, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	4.6	(NA)	(X)	(4)
2499- --	**WOOD PRODUCTS, N.E.C.**						
	Total	**(NA)**	**(X)**	**3 152.9**	**(NA)**	**(X)**	**2 304.8**
24991 --	Mirror and picture frames	(NA)	(X)	576.5	(NA)	(X)	505.5
	Frames for mirrors and pictures:						
24991 11	Wood	(NA)	(X)	208.9	71	(X)	*144.6
24991 15	Metal	(NA)	(X)	107.5	20	(X)	*94.1
	Finished moldings for mirrors and pictures:						
24991 31	Wood ---- mil lin ft	(NA)	(S)	49.4	26	(S)	45.7
24991 41	Metal ---- do	(NA)	(S)	13.7	9	(S)	44.7
	Framed pictures:						
24991 61	Wood	(NA)	(X)	92.3	31	(X)	*98.5
24991 71	Other than wood (metal, plastics, fiber)	(NA)	(X)	48.2	17	(X)	50.8
24991 00	Mirror and picture frames, n.s.k.	(NA)	(X)	56.5	(NA)	(X)	27.1
24992 --	Cork and cork products:						
24992 00	Cork and cork products, including natural and waste and articles made of naturally granulated and composition cork	(NA)	(X)	43.3	(NA)	(X)	40.9
24994 --	Miscellaneous wood products	(NA)	(X)	1 402.5	(NA)	(X)	1 164.8
24994 11	Jewelry boxes, silverware chests, instrument cases, cigar and cigarette boxes, microscope cases, tool or utensil cases, and similar boxes, and cases; and chests	(NA)	(X)	24.9	27	(X)	25.9
24994 14	Wood statuettes and other ornaments (including ash trays, bookends, etc.)	(NA)	(X)	49.6	(NA)	(X)	*96.3
24994 16	Wood tableware and kitchenware	(NA)	(X)	42.8			
24994 17	Wood fences, palings, and rails assembled into fence sections	(NA)	(X)	40.9	37	(X)	19.3
24994 19	Toothpicks, skewers, candy sticks, ice cream sticks, tongue depressors, drink mixers, and similar small wares	(NA)	(X)	57.8	10	(X)	43.5
24994 23	Firewood and fuel wood containing an added binder, including compressed logs	(NA)	(X)	52.2	12	(X)	17.8
24994 25	Bamboo, rattan, willow and chip, basketwork, wicker work, and related products of fibrous vegetable substances	(NA)	(X)	48.5	7	(X)	11.7
24994 41	Lasts for boots and shoes, wood and other materials; remodeled last sole patterns, forms, shoe trees; and stretchers for boots and shoes	(NA)	(X)	19.7	11	(X)	9.0
	Handtool handles:						
24994 51	Striking tool handles (axe, pick, hammer, etc.)	(NA)	(X)	33.0	19	(X)	31.7
24994 54	Other handtool handles including spade, shovel, rake, scythe, and other mechanics, farm, garden, household, etc.	(NA)	(X)	25.9	18	(X)	16.7
24994 57	Broom, mop, and paintbrush handles	(NA)	(X)	28.5	22	(X)	32.3
24994 58	Other handles: wooden tools, tool bodies, and backs for brooms, mops, and brushes	(NA)	(X)	18.6	26	(X)	20.8
24994 61	Clothespins ---- mil gross	(NA)	(D)	(D)	4	(S)	12.5
24994 62	Dowels and dowel pins (plain or sanded, grooved, or otherwise advanced in condition)	(NA)	(X)	53.2	27	(X)	93.7
24994 71	Stepladders ---- mil lin ft	(NA)	14.7	49.0	23	(S)	38.1
24994 75	Rung ladders (nonextension, extension, and scaffolding ladders) ---- do	(NA)	(S)	32.5	22	(S)	19.0
24994 79	Other scaffolding equipment (horses, scaffold jacks, extension planks, window jacks, etc.)	(NA)	(X)	(D)	5	(X)	(5)
24994 85	Wooden reels for wire and cable	(NA)	(X)	119.0	26	(X)	102.2
24994 89	Wood flour ---- 1,000 s tons	(NA)	(S)	21.7	10	(S)	9.2

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2499- —	**WOOD PRODUCTS, N.E.C.**—Con.						
24994 —	Miscellaneous wood products—Con.						
24994 91	Other fabricated industrial parts, except hardwood furniture parts ---- mil bd ft lum cons	(NA)	(S)	26.4	8	(S)	23.0
24994 97	Wood toilet seats, including molded wood ---- million	(NA)	(D)	(D)	9	(S)	52.0
24994 99	Miscellaneous wooden products, n.e.c., including articles of wood, not elsewhere specified, and wood turnings (except handles)[3]	(NA)	(X)	526.5	421	(X)	[5,6]401.2
24994 00	Miscellaneous wooden products, n.e.c., n.s.k.	(NA)	(X)	86.3	(NA)	(X)	88.9
24990 —	Wood products, n.e.c., n.s.k.	(NA)	(X)	1 130.7	(NA)	(X)	[4]593.6
24990 00	Wood products, n.e.c., n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	912.9	(NA)	(X)	[4]453.3
24990 02	Wood products, n.e.c., n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	217.8	(NA)	(X)	[4]140.3

Note: In 1987 Census of Manufactures, data for establishments of small single-unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

[1]Data reported by all producers, not just those with shipments of $100,000 or more.
[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
[3]For 1982, manufacture of waferboard and orientated strand board was included with particleboard industry.
[4]Data for 1987 and 1982 are not wholly comparable at the four-digit product code level due to the 1987 Standard Industrial Classification which created new industry 2493, Reconstituted Wood Products, out of old industry 2492, Particleboard, and parts of old industries 2499, Wood Products, N.E.C., and 2661, Building Paper and Board Mills. Accordingly, for 1982, the "n.s.k." product codes 2493000 and 2493002 are combined with product codes 2499000 and 2499002.
[5]For 1982, data for product codes 2499414 and 2499416 included coat and garment hangers, and carvings and household type utensils other than statuettes, tableware, and kitchenware which for 1987 are classified under code 2499499.
[6]For 1982, product code 2499479 was included with product code 2499499.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2441, NAILED WOOD BOXES AND SHOOK				
	Materials, containers, and supplies ----	**(X)**	**157.6**	**(X)**	**145.4**
241113	Hardwood and softwood logs, bolts, and unsliced flitches ---- mil ft (log scale)	32.5	6.5	(3)	(3)
	Rough lumber:				
242110	Hardwood ---- mil bd ft	(S)	8.7	(S)	8.4
242121	Softwood ---- do	(S)	15.0	(S)	33.6
	Dressed lumber:				
242117	Hardwood ---- mil bd ft	(S)	3.4	(3)	(3)
242128	Softwood ---- do	**116.0	27.8	108.4	17.0
243056	Plywood, hardwood and softwood ----	(X)	3.9	(X)	14.4
970099	All other materials and components, parts, containers, and supplies ----	(X)	38.4	(X)	[3]21.5
971000	Materials, containers, and supplies, n.s.k.[2] ----	(X)	53.9	(X)	50.5
	INDUSTRY 2448, WOOD PALLETS AND SKIDS				
	Materials, containers, and supplies ----	**(X)**	**810.7**	**(X)**	**540.7**
241113	Hardwood and softwood logs, bolts, and unsliced flitches ---- mil ft (log scale)	(S)	53.2	(S)	36.4
	Rough lumber:				
242110	Hardwood ---- mil bd ft	**930.2	166.2	*735.6	101.1
242121	Softwood ---- do	**247.3	35.9	*155.9	21.4
	Dressed lumber:				
242117	Hardwood ---- mil bd ft	*76.0	14.5	**146.8	25.7
242128	Softwood ---- do	**301.6	49.5	**321.8	38.3
243056	Plywood, hardwood and softwood ----	(X)	13.8	(X)	12.0
970099	All other materials and components, parts, containers, and supplies ----	(X)	72.4	(X)	34.2
971000	Materials, containers, and supplies, n.s.k.[2] ----	(X)	405.2	(X)	271.6

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982**—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987 Quantity[1]	1987 Delivered cost (million dollars)	1982 Quantity[1]	1982 Delivered cost (million dollars)
	INDUSTRY 2449, WOOD CONTAINERS, N.E.C.				
	Materials, parts, and supplies	**(X)**	**117.4**	**(X)**	**158.7**
241113	Hardwood and softwood logs, bolts, and unsliced flitches, mil ft (log scale)	*31.4	5.6	103.0	18.4
	Rough lumber:				
242110	Hardwood, mil bd ft	**105.2	22.0	**214.1	29.1
242121	Softwood, do	(D)	(D)	(S)	3.2
	Dressed lumber:				
242117	Hardwood, mil bd ft	(D)	(D)	*19.4	4.0
242128	Softwood, do	*13.6	3.1	**15.8	2.5
243056	Plywood, hardwood and softwood	(X)	(D)	(X)	5.3
	Veneer:				
243540	Hardwood, mil sq ft sm	83.3	9.8	*382.6	13.8
243640	Softwood, mil sq ft 1 in. basis	(S)	(D)	(S)	6.8
970099	All other materials and components, parts, containers, and supplies	(X)	30.5	(X)	52.6
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	30.2	(X)	23.4
	INDUSTRY 2491, WOOD PRESERVING				
	Materials, parts, and supplies	**(X)**	**1 514.5**	**(X)**	**891.2**
	Treated in same establishment:				
241109	Poles, piling, and other round or hewn wood products	(X)	213.2	(X)	194.4
	Rough lumber, including sawn ties:				
242110	Hardwood, mil bd ft	(S)	124.1	*691.1	132.7
242121	Softwood, do	*1 803.5	523.8	*630.7	171.3
	Consumed in same establishment:				
286551	Creosote oil, mil gal	*53.5	45.0	66.2	79.4
291108	Petroleum solvents, do	*18.4	11.9	*27.7	28.3
286915	Pentachlorophenol, mil lb	**25.7	27.2	**57.9	26.8
281902	Water-born salts, do	85.8	62.1	*24.5	30.2
280015	Flame retardants, do	(S)	11.4	(S)	8.4
970099	All other materials, components, parts, containers, and supplies	(X)	198.6	(X)	67.4
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	297.2	(X)	152.3
	INDUSTRY 2493, RECONSTITUTED WOOD PRODUCTS				
	Materials, parts, and supplies	**(X)**	**1 214.9**	**(NA)**	**(NA)**
	Logs, bolts, and unsliced flitches:				
241111	Hardwood, mil ft (log scale)	109.1	11.2	(NA)	(NA)
241112	Softwood, do	*450.1	38.5	(NA)	(NA)
241131	Pulpwood, 1,000 cords	**2 486.9	114.4	(NA)	(NA)
242016	Chips, slabs, edgings, sawdust, and other wood waste, except planer shavings, 1,000 s tons	(S)	85.6	(NA)	(NA)
242017	Planer shavings, do	3 889.0	92.0	(NA)	(NA)
	Plywood:				
243510	Hardwood, mil sq ft sm	(S)	.5	(NA)	(NA)
243601	Softwood, mil sq ft (3/8 in. basis)	(S)	.4	(NA)	(NA)
249310	Particleboard, mil sq ft (3/4 in. basis)	(S)	44.0	(NA)	(NA)
249340	Hardboard (wood fiberboard), mil sq ft (1/8 in. basis)	(S)	58.1	(NA)	(NA)
249330	Medium density fiberboard (MDF), mil sq ft (3/4 in. basis)	(X)	26.8	(NA)	(NA)
282141	Urea and melamine resins, mil lb (dry basis)	1 344.9	125.9	(NA)	(NA)
282142	Phenolic and other tar acid resins, do	(S)	75.4	(NA)	(NA)
282108	All other plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes, mil lb	(S)	18.3	(NA)	(NA)
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products, 1,000 gal	7 217.4	39.0	(NA)	(NA)
289100	Adhesives and sealants, mil lb	16.6	4.5	(NA)	(NA)
970099	All other materials and components, parts, containers, and supplies	(X)	355.2	(NA)	(NA)
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	127.1	(NA)	(NA)
	INDUSTRY 2499, WOOD PRODUCTS, N.E.C.				
	Materials, containers, and supplies	**(X)**	**1 378.4**	**(NA)**	**(NA)**
	Logs, bolts, and unsliced flitches:				
241111	Hardwood, mil ft (log scale)	**130.8	26.7	(NA)	(NA)
241112	Softwood, do	(S)	9.1	(NA)	(NA)
	Rough lumber:				
242110	Hardwood, mil bd ft	*261.0	66.4	(NA)	(NA)
242121	Softwood, do	*191.7	73.3	(NA)	(NA)
	Dressed lumber:				
242117	Hardwood, mil bd ft	*116.5	31.3	(NA)	(NA)
242128	Softwood, do	*366.5	57.6	(NA)	(NA)
242016	Chips, slabs, edgings, sawdust, and other wood waste, except planer shavings, 1,000 s tons	(S)	8.9	(NA)	(NA)
242017	Planer shavings, do	16.5	.4	(NA)	(NA)
242620	Hardwood dimension and parts, excluding furniture frames, mil bd ft	(S)	16.2	(NA)	(NA)

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982**—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2499, WOOD PRODUCTS, N.E.C.—Con.				
	Plywood:				
243510	Hardwood—mil sq ft sm	*32.7	15.9	(NA)	(NA)
243601	Softwood—mil sq ft (3/8 in. basis)	48.7	13.0	(NA)	(NA)
249340	Hardboard (wood fiberboard)—mil sq ft (1/8 in. basis)	(S)	24.0	(NA)	(NA)
249330	Medium density fiberboard (MDF)—mil sq ft (3/4 in. basis)	(S)	4.7	(NA)	(NA)
249310	Particleboard—do	(S)	6.0	(NA)	(NA)
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products—1,000 gal	*1 625.8	14.5	(NA)	(NA)
289100	Adhesives and sealants—mil lb	(S)	1.8	(NA)	(NA)
282141	Urea and melamine resins—mil lb (dry basis)	1.4	.2	(NA)	(NA)
282142	Phenolic and other tar acid resins—do	1.7	.9	(NA)	(NA)
282108	All other plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes—mil lb	**12.6	6.0	(NA)	(NA)
970099	All other materials and components, containers, and supplies	(X)	279.0	(NA)	(NA)
971000	Materials, containers, and supplies, n.s.k.[2]	(X)	722.5	(NA)	(NA)

[1]For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

[3]For 1982, material codes 241113 and 242117 were included with material code 970099.

APPENDIX
Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies–A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees–Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers–Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees–Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll–Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours–Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials–Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)–In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually $10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

Value of shipments and other receipts–Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

Shipments or production of individual products (table 2)–In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture–This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment–Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories–Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios–An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio–Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio–Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

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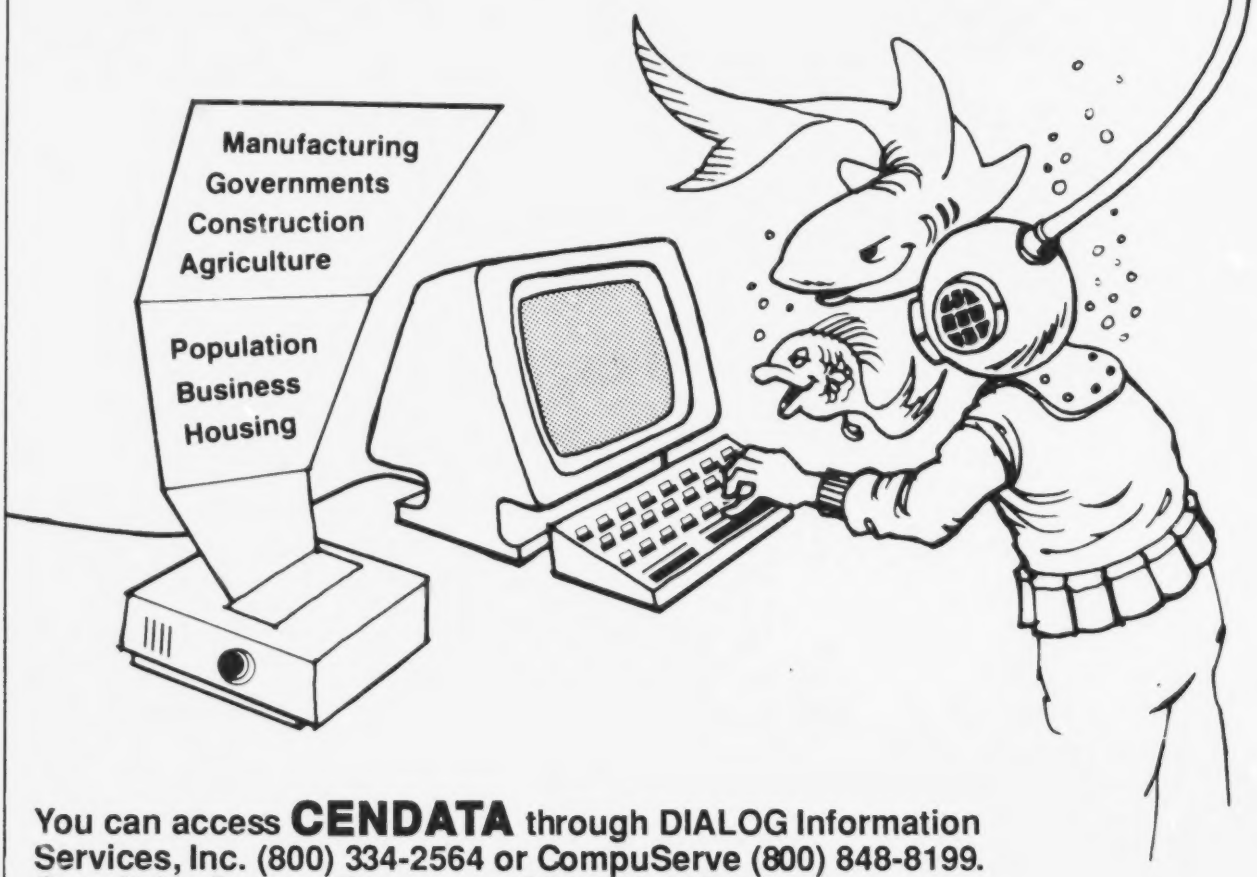

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